

**REMARKS**

Applicant has reviewed the Office Action mailed on July 21, 2003, as well as the art cited. Claims 1-38 are pending in this application. Claims 16, 22-24, 31, 36, 37 and 38 have been amended.

The indicated allowability of claims 7-8, 10-15, 18, 20-21, and 25-28 was withdrawn in view of the newly discovered reference(s) to Cassanova et al. (US Patent 5,031,075).

**Claim Objections**

Claim 31 was objected to because of minor grammatical errors introduced with the amendments filed on 4-17-03. Applicant has corrected the grammatical errors and therefore respectfully requests the withdrawal of the objection of Claim 31 for grammatical errors.

**Rejections Under 35 U.S.C. § 112**

Claim 38 was rejected under 35 USC § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicant has amended Claim 38 to address the Examiner's concerns. As amended, Claim 38 has support in the specification. Accordingly, the Applicant respectfully requests the withdrawal of the rejection of Claim 38.

Claims 16, 24, and 36-37 were rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention.

In regards to Claims 16 and 24, the Examiner stated that the terms "electronic modules" and "backplane" are conflicting and misdescriptive. Applicant has amended claims 16, 23 and 24 to further clarify and describe the terms "electronic modules" and "backplane." Accordingly, Applicant respectfully requests the withdrawal of the rejections of Claim 16 and 24 under 35 USC § 112.

In regards to Claims 36-37, the Examiner stated the language “that one of the electronic modules designed to operate in a non-redundant configuration is designated as a redundant module still appears conflicting.” Applicant respectfully traverses the Examiner’s assertion that the language “that one of the electronic modules designed to operate in a non-redundant configuration is designated as a redundant module still appears conflicting.” As is described in the specification and claimed in Claim 36, electronic modules in a housing that were originally designed to operate in a non-redundant configuration are adapted to provide redundancy with this invention. Therefore, the language “providing a housing having a plurality of electronic modules designed to operate in a non-redundant configuration” does not conflict with the language “designating one of the electronic modules as a redundant electronic module to back-up the remaining electronic module in a redundant configuration,” since the invention allows one of the electronic modules originally designed to be non-redundant to provide redundancy. Accordingly, the Applicant respectfully requests the withdrawal of the rejection of Claims 36-37 under 35 USC § 112.

#### Rejections Under 35 U.S.C. § 102

Claims 1-4 and 17 were rejected under 35 USC § 102(b) as being anticipated by Albert et al., (U.S. Patent No. 5,006,951). A 102(b) rejection requires that a single piece of art teach every element of a claim.

#### Claim 1

In regards to Claim 1, Applicant respectfully traverses the Examiner’s rejection of Claim 1 under 35 USC § 102(b) because the Albert et al. reference does not teach every element claimed in Claim 1 of the present application. For example, Claim 1 includes the elements “the active first electronic module electrically connectable to an active second electronic module,” “the backup first electronic module electrically connectable to a backup second electronic module” and “the switch/relay adapted to enable communication between the active first electronic module and the backup second electronic module.” The Albert et al. reference does not teach “the active first electronic module **electrically connectable** to an active second

electronic module,” “the backup first electronic module **electrically connectable** to a backup second electronic module” and “the switch/relay adapted **to enable communication between** the active first electronic module and the backup second electronic module,” (emphasis added) as is disclosed and claimed in Claim 1 of the present application. Please refer to paragraphs [0015] through [0017] of the present invention regarding a discussion of these elements. The Albert et al. reference relates to a locking handle means for gripping a printed circuit board. Although, the Albert et al. reference discloses an active and back up transmitter/receiver 48 and a primary and backup clock 52 in a submodule 42, the Albert does not teach the elements as set out above. Please refer to column 3, lines 45 to 66 of the Albert et al. reference. Since not every element of Claim 1 is taught by the Albert et al. reference, a rejection under 102 is improper.

Accordingly, the Applicant respectfully requests the withdrawal of the rejection of Claim 1 under 35 USC § 102(b) as being anticipated by Albert et al. Moreover, since Claims 2-5 and 17 depend from and further define patentably distinct Claim 1, Applicant respectfully requests the withdrawal of the rejections to Claims 2-5 and 17. Since, the Applicant believes Claims 2-5 and 17 are allowable for the above reason further response may not be put forth addressing additional rejections to said claims at this time. However, the Applicant retains the right to address any said rejections if further response is required.

Claims 1-2, 4-6, 9, and 19 were rejected under 35 USC § 102(b) as being anticipated by Bagley, (U.S. Patent No. 5,991,852).

#### Claim 1

In regards to Claim 1, Applicant respectfully traverses the Examiner’s rejection of Claim 1 under 35 USC § 102(b) because the Bagley et al. reference does not teach every element claimed in Claim 1 of the present application. For example, Claim 1 includes the elements “the active first electronic module electrically connectable to an active second electronic module,” “the backup first electronic module electrically connectable to a backup second electronic module” and “ the switch/relay adapted to enable communication between the active first electronic module and the backup second electronic module.” The Bagley et al. reference does

not teach “the active first electronic module electrically connectable to an active second electronic module,” “the backup first electronic module electrically connectable to a backup second electronic module” and “the switch/relay adapted to enable communication between the active first electronic module and the backup second electronic module,” as is disclosed and claimed in Claim 1 of the present application. Please refer to paragraphs [0015] through [0017] of the present invention regarding a discussion of these elements. The Bagley et al. reference relates to shadow memory that is coupled to a common data bus as the main memory and is written to simultaneously. Please see column 1, lines 56 through 63 of the Bagley et al. reference. This is not what has been disclosed or claimed in the present application.

In addition, the Examiner asserts Bagley et al. discloses a card cage 140 attachable to a housing. However, 140 of Figure 6 is described as a “chassis (housing) 140” (i.e. the chassis and the housing are the same thing in the Bagley et al reference). Please see column 6, lines 44-48 of the Bagley et al. reference. Hence, the “card cage attachable to the housing” element of Claim 1 of the present application is not taught by the Bagley et al. reference. Moreover, the elements “an active first electronic module **disposed within the card cage** ....electrically connectable to an active second electronic module **disposed within the housing...**” (emphasis added) and “a backup first electronic module **disposed within the card cage** ... electrically coupled to a backup second electronic module **disposed within the housing...**” (emphasis added) are also not taught by the Bagley et al. reference. Since not every element of Claim 1 is taught by the Bagley et al. reference, a rejection under 102 is improper.

Accordingly, the Applicant respectfully requests the withdrawal of the rejection of Claim 1 under 35 USC § 102(b) as being anticipated by Bagley et al. Moreover, since Claims 2-5 and 17 depend from and further define patentably distinct Claim 1, Applicant respectfully requests the withdrawal of the rejections to Claims 2-5 and 17. Since, the Applicant believes Claims 2-5 and 17 are allowable for the above reason further response may not be put forth addressing additional rejections to said claims at this time. However, the Applicant retains the right to address any said rejections if further response is required.

Claim 6

In regards to Claim 6, Applicant respectfully traverses the Examiner's rejection of Claim 6 under 35 USC § 102(b) because the Bagley et al. reference does not teach every element claimed in Claim 1 of the present application. For example, Claim 6 includes the elements "a first module; a first backplane disposed within the first module" and "a second module attached to the first module, the second module comprising a backplane." The Bagley et al. reference does not teach "a first module; a first backplane disposed within the first module" and "a second module attached to the first module, the second module comprising a backplane," as is disclosed and claimed in Claim 6 of the present application. An example of a first 102 and second module 104 covered by Claim 6 of the present application are illustrated in Figures 1 and 2 of the present application. For further discussion of first and second modules 102 and 104 please refer to paragraphs [0009] and [0010] of the present application. As discussed above with regard to the card cage (housing) 140 of the Bagley et al. reference, the Bagley et al. reference does not teach separate attachable modules as is disclosed and claimed in the present application. For example, Figure 6 of the Bagley et al. reference "illustrates an arrangement according to the present invention in which back-to-back circuit boards, left controller 102, and right controller 109, are mounted in the center of a chassis (housing) 140." Please refer to column 6, lines 44 through 48 of the Bagley et al. reference. Since not every element of Claim 6 is taught by the Bagley et al. reference, a rejection under 102 is improper.

Accordingly, the Applicant respectfully requests the withdrawal of the rejection of Claim 6 under 35 USC § 102(b) as being anticipated by Bagley et al. Moreover, since Claims 7-11 and 18-19 depend from and further define patentably distinct Claim 6, Applicant respectfully requests the withdrawal of the rejections to Claims 7-11 and 18-19. Since, the Applicant believes Claims 7-11 and 18-19 are allowable for the above reason further response may not be put forth addressing additional rejections to said claims at this time. However, the Applicant retains the right to address any said rejections if further response is required.

Claims 29-36 and 38 were rejected under 35 USC § 102(e) as being anticipated by Cloonan et al., (U.S. Patent No. 6,449,249).

Claim 29

In regards to independent Claim 29, the Applicant respectfully traverses the Examiner's rejection under 35 USC § 102(e) as being anticipated by the Cloonan et al. reference. Claim 29, includes the element, "wherein the housing is adapted to receive a module to communicatively couple to one or more of the plurality of cards in the housing to add redundancy to the telecommunications system." The Cloonan et al. reference does not teach "wherein the housing is adapted to receive a module to communicatively couple to one or more of the plurality of cards in the housing to add redundancy to the telecommunications system," as is disclosed and claimed in Claim 29 of the present application. An example of a housing 100 and a module 104 covered by Claim 29 is illustrated in Figures 1 and 2 of the present application. Further discussion can be found in paragraphs [009] and [0010] of the present application. The Cloonan et al. reference relates to spare circuit switching cards located in a single circuit card cage. Please see Figure 4 and column 5, lines 57 -59 of the Cloonan et al. reference. In addition, the Examiner has stated that the Cloonan et al. reference discloses "wherein the housing may receive a module (one of 430, 435, 440, 445, 450) to communicatively couple to one or more of the plurality of cards in the housing to add redundancy..." However, 430, 435, 440, 445 and 450 are described as RF switching cards at column 6, lines 36-52, of the Cloonan et al. reference. This not what has been disclosed or claimed in the present application (i.e. the module 104 defined in the present application is not a switching card of the Cloonan et al. reference). Since not every element of Claim 29 is taught by the Cloonan et al. reference, a rejection under 102 is improper.

Accordingly, the Applicant respectfully requests the withdrawal of the rejection of Claim 29 under 35 USC § 102(e) as being anticipated by Cloonan et al. Moreover, since Claims 30-32 depend from and further define patentably distinct Claim 29, Applicant respectfully requests the withdrawal of the rejections to Claims 30-32. Since, the Applicant believes Claims 30-32 are allowable for the above reason further response may not be put forth addressing additional rejections to said claims at this time. However, the Applicant retains the right to address any said rejections if further response is required.

Claim 33

In regards to independent Claim 33, the Applicant respectfully traverses the Examiner's rejection under 35 USC § 102(e) as being anticipated by the Cloonan et al. reference. Claim 33, includes the element, "wherein the housing is adapted to receive an adaptation module to selectively, communicatively couple to the plurality of electronic modules in the housing." The Cloonan et al. reference does not teach "wherein the housing is adapted to receive an adaptation module to selectively, communicatively couple to the plurality of electronic modules in the housing," as is disclosed and claimed in Claim 33 of the present application. An example of a housing 100 and an adaptation module 104 covered by Claim 33 is illustrated in Figures 1 and 2 of the present application. Further discussion can be found in paragraphs [009] and [0010] of the present application. The Cloonan et al. reference relates to spare circuit switching cards located in a single circuit card cage. Please see Figure 4 and column 5, lines 57 -59 of the Cloonan et al. reference. In addition, the Examiner has stated that the Cloonan et al. reference discloses "wherein the housing may receive a module (one of 430, 435, 440, 445, 450) to selectively communicatively couple to the plurality of cards in the housing ...." However, 430, 435, 440, 445 and 450 of the Cloonan et al reference are described as RF switching cards at column 6, lines 36-52. This not what has been disclosed or claimed in the present application (i.e. the adaptation module 104 defined in the present application is not a switching card of the Cloonan et al. reference). Since not every element of Claim 33 is taught by the Cloonan et al. reference, a rejection under 102 is improper.

Accordingly, the Applicant respectfully requests the withdrawal of the rejection of Claim 33 under 35 USC § 102(e) as being anticipated by Cloonan et al. Moreover, since Claims 34-35 depend from and further define patentably distinct Claim 33, Applicant respectfully requests the withdrawal of the rejections to Claims 34-35. Since, the Applicant believes Claims 34-35 are allowable for the above reason further response may not be put forth addressing additional rejections to said claims at this time. However, the Applicant retains the right to address any said rejections if further response is required.

Claim 36

In regards to independent Claim 36, Applicant has amended Claim 36 to clarify the module claimed is an “adaptive module.” The Applicant respectfully traverses the Examiner’s rejection under 35 USC § 102(e) as being anticipated by the Cloonan et al. reference. Claim 36, now includes the element, “attaching an adaptive module to the housing to selectively communicate with the plurality of electronic modules.” The Cloonan et al. reference does not teach “attaching an adaptive module to the housing to selectively communicate with the plurality of electronic modules,” as is disclosed and claimed in Claim 36 of the present application. An example of a housing 100 and an adaptive module 104 covered by Claim 36 is illustrated in Figures 1 and 2 of the present application. Further discussion can be found in paragraphs [009] and [0010] of the present application. The Cloonan et al. reference relates to spare circuit switching cards located in a single circuit card cage. Please see Figure 4 and column 5, lines 57 - 59 of the Cloonan et al. reference. In addition, the Examiner has stated that the Cloonan et al. reference discloses “attaching a redundancy module (comprising 410, 401 and their respective switching cards). However, 410 and 401 of the Cloonnan et al reference are described as spare cable interface circuit cards at column 6, lines 36-39. This not what has been disclosed or claimed in the present application (i.e. the adaptive module 104 defined in the present application is not a spare cable interface circuit card of the Cloonan et al. reference). Since not every element of Claim 36 is taught by the Cloonan et al. reference, a rejection under 102 is improper.

Accordingly, the Applicant respectfully requests the withdrawal of the rejection of Claim 36 under 35 USC § 102(e) as being anticipated by Cloonan et al. Moreover, since Claim 37 depends from and further defines patentably distinct Claim 36, Applicant respectfully requests the withdrawal of the rejection to Claims 37. Since, the Applicant believes Claims 37 is allowable for the above reason further response may not be put forth addressing additional rejections to said claim at this time. However, the Applicant retains the right to address any said rejections if further response is required.

Claim 38



In regards to independent Claim 38, the Applicant respectfully traverses the Examiner's rejection under 35 USC § 102(e) as being anticipated by the Cloonan et al. reference. Claim 38, includes the element, "a self-contained module adapted to plug into the housing to add redundancy to the telecommunications system..." The Cloonan et al. reference does not teach "a self-contained module adapted to plug into the housing to add redundancy to the telecommunications system," as is disclosed and claimed in Claim 38 of the present application. An example of a housing 100 and a self contained module 104 covered by Claim 38 is illustrated in Figures 1 and 2 of the present application. Further discussion can be found in paragraphs [009] and [0010] of the present application. The Cloonan et al. reference relates to spare circuit switching cards located in a single circuit card cage. Please see Figure 4 and column 5, lines 57 - 59 of the Cloonan et al. reference. In addition, the Examiner has stated that the Cloonan et al. reference discloses "the housing is adapted to receive a self-contained module 401...." However, 401 of the Cloonan et al. reference is described as a spare cable interface card at column 6, lines 36-39. This not what has been disclosed or claimed in the present application (i.e. the self-contained module 104 defined in the present application is not a switching card of the Cloonan et al. reference). Since not every element of Claim 33 is taught by the Cloonan et al. reference, a rejection under 102 is improper. Accordingly, the Applicant respectfully requests the withdrawal of the rejection of Claim 33 under 35 USC § 102(e) as being anticipated by Cloonan et al.

#### Rejections Under 35 U.S.C. § 103

Claims 1-5 were rejected under 35 USC § 103(a) as being unpatentable over Cloonan et al., (U.S. Patent No. 6,449,249) in view of Cassanova et al. (U.S. Patent No. 5,031,075). To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. MPEP 2143

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. MPEP 2143 citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

#### Claim 1

Applicant respectfully traverses the Examiner's rejection of Claim 1 under 103. Claim 1 includes the element "a card cage attachable to the housing." Neither the Cloonan et al. nor the Cassanova et al. reference teach or suggest "a card cage attachable to the housing," as is disclosed and claimed in Claim 1 of the present application. The Examiner has asserted that "Cloonan discloses a telecommunication system adaptive module inherently comprising a housing." However, even if that were the case, it is not inherently obvious that a card cage is "attachable to the housing" and yet not received in the housing as is disclosed and Claimed in Claim 1 of the present application. Please refer to paragraph [0009] of the present application for an example of an embodiment of this covered by the elements of Claim 1. Claim 1 further includes the elements "an active first electronic module **disposed within the card cage** ... an active second electronic module **disposed within the housing** ... a backup first electronic module **disposed within the card cage** ... a backup second electronic module **disposed within the housing**" emphasis added. Neither the Cloonan et al. nor the Casanova et al. reference teach or suggest "an active first electronic module **disposed within the card cage** ... an active second electronic module **disposed within the housing** ... a backup first electronic module **disposed within the card cage** ... a backup second electronic module **disposed within the housing**," as is disclosed and claimed in Claim 1 of the present application. Figure 4, of the Cloonan et al. reference relates to active and spare circuit cards paired with switch cards that are daisy chained with prior and succeeding switches contained in a circuit card cage. Please see Column 5, lines 56-57 and column 6, lines 36-42 of the Cloonan et al. reference. In particular, 430, 435, 440, 445 and 450 are described as RF switching cards. The Casanova et al. reference relates to a doubled sided logic cage to increase logic card density. Please see column 2, lines 15-19. This is not what is disclosed and Claimed in Claim 1 of the present application. Since not every element of

Claim 1 is taught or suggested by either the Cloonan et al. reference or the Cassanova et al. reference alone or in combination, a rejection under 103 is improper.

Accordingly, the Applicant respectfully requests the withdrawal of the rejection of Claim 1 under 35 USC § 103(a). Moreover, since Claims 2-5 depend from and further define patentably distinct Claim 1, Applicant respectfully requests the withdrawal of the rejection to Claims 2-5. Since, the Applicant believes Claims 2-5 is allowable for the above reason further response may not be put forth addressing additional rejections to said claim at this time. However, the Applicant retains the right to address any said rejections if further response is required.

#### Claim 5

Further, dependant Claim 5 includes the element “wherein the back plane is disposed within the card cage” and the element the “card cage attachable to the housing.” In light of the discussion put forth with regard to the rejection of Claim 1 under 103, neither the Cloonan et al. nor the Cassanova et al. reference alone or in combination teach or suggest “wherein the back plane is disposed within the card cage” and “card cage attachable to the housing,” as is disclosed and claimed in Claim 5 of the present application. Since not every element of Claim 5 is taught or suggested by neither Cloonan et al. reference nor the Cassanova et al. reference alone or in combination, a rejection under 103(a) is improper and the Applicant respectfully requests the withdrawal of the rejection of Claim 5 under 35 USC § 103(a).

#### Further Rejections Under 35 U.S.C. § 102

Claims 7-16, 18-22, 24-28 were rejected under 35 USC § 102(b) as being anticipated by Bagley, (U.S. Patent No. 5,991,852) in view of Cassanova et al. (US 5,0310,075).

35 USC §102 states in part:

A person shall be entitled to a patent unless \_ ...

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in the this country, more than one year prior to the data of the application for patent in the United States, ... (emphasis added)

Applicant respectfully traverses the Examiners rejections of Claims 7-16, 18-22, 24-28 under 35 USC § 102(b) as being anticipated by Bagley, (U.S. Patent No. 5,991,852) in view of Cassanova et al. (US 5,0310,075) because it is an improper rejection. As indicated above, a proper rejection under section 102(b) requires the use of a single art reference. That is, it is improper to combine art reference in making a 102(b) rejection. Accordingly, the Applicant respectfully requests the withdrawal of the rejections of Claims 7-16, 18-22, 24-28 under 35 USC § 102(b) as being anticipated by Bagley, (U.S. Patent No. 5,991,852) in view of Cassanova et al. (US 5,0310,075).

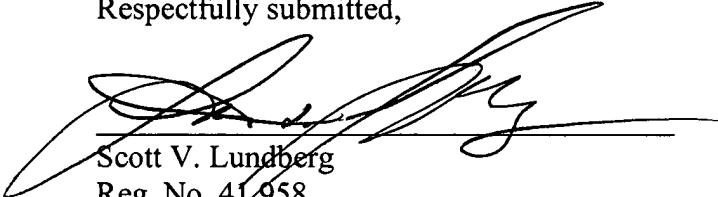
### CONCLUSION

Applicant respectfully submits that claims 1-38 are in condition for allowance and notification to that effect is earnestly requested. If necessary, please charge any additional fees or credit overpayments to Deposit Account No. 502432.

If the Examiner has any questions or concerns regarding this application, please contact the undersigned at (612) 332-4720.

Respectfully submitted,

Date: 10-27-03

  
\_\_\_\_\_  
Scott V. Lundberg  
Reg. No. 41,958

Attorneys for Applicant  
Fogg and Associates, LLC  
P.O. Box 581339  
Minneapolis, MN 55458-1339  
T – (612) 332-4720  
F – (612) 677-3553